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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,904	06/20/2003	Robert Sigurd Nelson		9224

7590 06/15/2006

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EXAMINER

KIKNADZE, IRAKLI

ART UNIT	PAPER NUMBER
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2882

DATE MAILED: 06/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/600,904	NELSON ET AL.	
	Examiner	Art Unit	
	Irakli Kiknadze	2882	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 57-59 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 59 is/are allowed.
- 6) ☒ Claim(s) 57 is/are rejected.
- 7) ☒ Claim(s) 58 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In response to the Office action dated January 24, 2006 the Amendment has been received on March 8, 2006.

Claims 57-59 are currently pending in this application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 57 is rejected under 35 U.S.C. 102(b) as being anticipated by Dobbs et al. (US Patent 5,444,752).

With respect to claim 57, Dobbs teaches a method of calibrating a radiation detection system (14) comprising: providing an X-ray radiation source (12) (column 4, lines 30-33), measuring the level of radiation emitted from the source that is detected by the detection system (14) (column 6, lines 59-61), and calibrating the detection system (14) by evaluating the detected radiation and balancing the system based upon the detected radiation (column 6, lines -68).

4. Claim 57 is rejected under 35 U.S.C. 102(e) as being anticipated by Spitz et al. (US Patent 6,362,471 B1).

With respect to claim 57, Spitz teaches a method of calibrating a radiation detection system comprising: providing a radiation source (12), measuring the level of radiation emitted from the source (12) that is detected by the detection system (16) (column 3, lines 1-10), and calibrating the detection system by evaluating the detected radiation and balancing the system based upon the detected radiation (column 12, line 59 – column 13, line 15).

5. Claim 57 is rejected under 35 U.S.C. 102(e) as being anticipated by Kump et al. (US Patent 6,460,003 B1).

With respect to claim 57, Kump teaches a method of calibrating a radiation detection system comprising (see abstract): providing a radiation source (114), measuring the level of radiation emitted from the source (114) that is detected by the detection system (114) (Fig.1; column 3, lines 10-14 and 20-24), and calibrating the detection system by evaluating the detected radiation and balancing the system based upon the detected radiation (see Fig.2; column 6, line 63 – column 7, line 8).

Allowable Subject Matter

6. Claim 58 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claim 59 is allowed.

8. The following is a statement of reasons for the indication of allowable subject matter:

With respect to claim 58 the prior art fails to teach or make obvious a method of calibrating a radiation detection system comprising: measuring an energy-dependent modulation transfer function of the detection system and calibrating the system by accounting for both a detected radiation and the energy-dependent modulation transfer function as claimed including all of the limitations of the base claim and any intervening claims.

With respect to claim 59 the prior art fails to teach or make obvious a method of estimating the effects of tissue attenuation on the intensity and energy distribution of an X-ray beam comprising: measuring a first position-dependent, energy-dependent intensity profile of the X-ray beam at a detector array, transmitting the x-ray beam through a patient, measuring a second position-dependent, energy-dependent intensity profile of the X-ray beam at the detector array immediately after the beam has been transmitted through the patient; and comparing the first and the second position-dependent, energy-dependent intensity profiles of the beam as claimed in combination with all elements of claim 59.

Response to Arguments

9. Applicant's arguments filed March 8, 2006, with respect to claim 57, have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "Dobb's (US Patent 5,444,752) detector does not offer energy resolution" and "Dobb's does not calibrate the energy spectrum of the x-ray beam as a function of position at the detector" or Spitz (US Patent 6,362,471) does not calibrates the spatial and energy dependence or Kump (US Patent 6,460,003) does not determine energy dependence as a function of position or energy dependence) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

10. Applicant's arguments, with respect to claim 58 have been fully considered and are persuasive. The rejection of claim 58 has been withdrawn.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Irakli Kiknadze whose telephone number is 571-272-2493. The examiner can normally be reached on 9:00- 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on 571-272-2490. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Irakli Kiknadze
June 6, 2006

IK


EDWARD J. GLICK
SUPERVISORY PATENT EXAMINER